Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Original): A network switching device comprising multiple ports wherein a port has access to a local lookup table, and wherein the lookup table is populated with table entries based on use.

Claim 2 (Original): The network switching device of claim 1 further including a search engine coupled to the lookup table.

Claim 3 (Original): The network switching device of claim 1 wherein the lookup table stores source and destination addresses and wherein the destination addresses are tracked to determine how recently they have been used and are deleted if not used within a predetermined period of time.

Claim 4 (Original): The network switching device of claim 1 wherein a lookup table associated with a first port stores different destination addresses then a lookup table associated with a second port.

Claim 5 (Original): The network switching device of claim 1 wherein the lookup table includes a network address field comprising addresses of nodes on a network, and a forwarding information field comprising forwarding information associated with the network address.

Claim 6 (Currently Amended): A method for forwarding network frames on a network forwarding device, comprising the steps of:

receiving, on a first port, a network address including a source address and a destination ~~addresses~~ address ~~on a first port~~;

searching a lookup table within the first port for the destination address;

if the destination address is not found in the lookup table, learning the destination address by inserting an entry in the lookup table for the destination address; and

wherein other ports on the network forwarding device do not learn the destination address because of receipt on the first port.

Claim 7 (Original): A network switching device comprising:

a central management module storing a central lookup table including one or more entries;

a first switching interface coupled to the central management module, the first switching interface storing a first portion of the entries in a first local table; and

a second switching interface coupled to the central management module, the second switching interface storing a second portion of the entries in a second local table, characterized in that the central management module receives from the first switching interface a request for information associated with one of the entries in the central lookup table and the central management module transmits the information to only the first switching interface for storing only in the first local table as a part of a new entry.

Claim 8 (Original): The network switching device of claim 7, wherein the first and second switching interfaces are first and second ports on the network switching device

Claim 9 (Original): The network switching device of claim 7 further characterized in that the central management module foregoes transmittal of the information to the second switching interface.

Claim 10 (Original): The network switching device of claim 7, wherein the first and second local tables store active entries used by the first and second switching interfaces during a predetermined time period.

Claim 11 (Original): The network switching device of claim 7, wherein an entry in the first or second local table is removed if not used within a predetermined time period.

Claim 12 (Original): The network switching device of claim 11, wherein the entry is removed from all local tables.

Claim 13 (Original): The network switching device of claim 11, wherein the entry is removed from a single local table.

Claim 14 (Original): A method for forwarding data packets via a network switching device having a plurality of switching interfaces, each switching interface storing a local lookup table, the method comprising:

receiving at a switching interface a data packet including a destination address;

searching a local lookup table associated with the switching interface for the destination address;

transmitting by the switching interface a request for information associated with the destination address if the search is unsuccessful;

transmitting the information to the requesting switching interface for storing in the associated local lookup table; and foregoing transmittal of the information to non-requesting switching interfaces.

Claim 15 (Original): The method of claim 14, wherein the switching interface is a port on the network switching device

Claim 16 (Original): The method of claim 14, wherein the local lookup table stores active entries used by the switching interface during a predetermined time period.

Claim 17 (Original): The method of claim 14 further comprising removing an entry in the local lookup table if the entry is not used within a predetermined time period.

Claim 18 (Original): The method of claim 17, wherein the entry is removed from all local lookup tables.